

WEST

Generate Collection

Print

10/214,065

L10: Entry 1 of 3

File: PGPB

Jan 30, 2003

PGPUB-DOCUMENT-NUMBER: 20030023038

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030023038 A1

TITLE: Heterologous polypeptide of the TNF family

PUBLICATION-DATE: January 30, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rennert, Paul	Millis	MA	US	
Thompson, Jeffrey S.	Stoneham	MA	US	
Ambrose, Christine	Reading	MA	US	
Cachero, Teresa G.	Brookline	MA	US	

US-CL-CURRENT: 530/350; 435/320.1, 435/325, 435/69.7, 536/23.5

CLAIMS:

We claim:

1. An isolated polypeptide comprising an APRIL subunit linked via a non-covalent interaction to a BAFF subunit.

2. An isolated polypeptide comprising a) an APRIL subunit selected from the group consisting of: i) partial human APRIL (SEQ ID NO: 2), human APRIL (SEQ ID NO: 2), partial murine APRIL (SEQ ID NO: 4) and murine APRIL (SEQ ID NO: 4) or ii) amino acid substitution variants of partial human APRIL (SEQ ID NO: 2), human APRIL (SEQ ID NO: 2), partial murine APRIL (SEQ ID NO: 4) and murine APRIL (SEQ ID NO: 4); and b) linked via a non-covalent interaction to a BAFF subunit selected from the group consisting of: i) partial human BAFF (SEQ ID NO: 6), human BAFF (SEQ ID NO: 6), partial murine BAFF (SEQ ID NO: 8) and murine BAFF (SEQ ID NO: 8) or ii) amino acid substitution variants of partial human BAFF (SEQ ID NO: 6), human BAFF (SEQ ID NO: 6), partial murine BAFF (SEQ ID NO: 8) and murine BAFF (SEQ ID NO: 8).

3. An isolated polypeptide comprising a) an APRIL subunit comprising an amino acid sequence of an APRIL subunit encoded by mammalian DNA which hybridizes under high stringency conditions to a probe having the sequence of the complement of an APRIL nucleotide sequence selected from the group consisting of: i) partial human APRIL cDNA (SEQ ID NO: 1), human APRIL cDNA (SEQ ID NO: 1), partial murine APRIL cDNA (SEQ ID NO: 3) and murine APRIL cDNA (SEQ ID NO: 3) or ii) a degenerate variant of a sequence selected from partial human APRIL cDNA (SEQ ID NO: 1), human APRIL cDNA (SEQ ID NO: 1), partial murine APRIL cDNA (SEQ ID NO: 3) and murine APRIL cDNA (SEQ ID NO: 3); b) linked via a non-covalent interaction to a BAFF subunit comprising an amino acid sequence encoded by mammalian DNA which hybridizes to a probe under high stringency conditions having the sequence of the complement of an BAFF nucleotide sequence selected from the group consisting of: i) partial human BAFF cDNA (SEQ ID NO: 5), human BAFF cDNA (SEQ ID NO: 5), partial murine BAFF cDNA (SEQ ID NO: 7) and murine BAFF cDNA (SEQ ID NO: 7) or ii) a degenerate variant of a sequence selected from partial human BAFF cDNA (SEQ ID NO: 5), human BAFF cDNA (SEQ ID NO: 5), partial murine BAFF cDNA (SEQ ID NO: 7) and murine BAFF cDNA (SEQ ID NO: 7).

4. An isolated polypeptide according to claim 1 and 2, further comprising more than

one APRIL subunit linked non-covalently to a BAFF subunit.

5. The isolated polypeptide of claim 4, wherein two APRIL subunits are linked non-covalently to a BAFF subunit.

6. An isolated polypeptide according to claim 1, further comprising more than one BAFF subunits linked non-covalently to an APRIL subunit.

7. The isolated polypeptide of claim 6, wherein two BAFF subunits are linked non-covalently to an APRIL subunit.

8. A method of inhibiting B-cell growth in an animal comprising the step of administering a therapeutically effective amount of a composition selected from the group consisting of: (a) An isolated APBF molecule or an active fragment thereof; (b) A recombinant APBF molecule or an active fragment thereof; and (c) an antibody specific for APBF or an active fragment thereof.

9. A method of inhibiting T-cell growth in an animal comprising the step of administering a therapeutically effective amount of a composition selected from the group consisting of: (a) An isolated APBF molecule or an active fragment thereof; (b) A recombinant APBF molecule or an active fragment thereof; and (c) an antibody specific for APBF or an active fragment thereof.

10. A method of inhibiting tumor cell growth in an animal comprising the step of administering a therapeutically effective amount of a composition selected from the group consisting of: (a) An isolated APBF molecule or an active fragment thereof; (b) A recombinant APBF molecule or an active fragment thereof; and (c) an antibody specific for APBF or an active fragment thereof.

11. A method of stimulating B-cell growth in an animal comprising the step of administering a therapeutically effective amount of a composition selected from the group consisting of: (a) An isolated APBF molecule or an active fragment thereof; (b) A recombinant APBF molecule or an active fragment thereof; and (c) an antibody specific for APBF or an active fragment thereof.

12. A method of stimulating T-cell growth in an animal comprising the step of administering a therapeutically effective amount of a composition selected from the group consisting of: (a) An isolated APBF molecule or an active fragment thereof; (b) A recombinant APBF molecule or an active fragment thereof; and (c) an antibody specific for APBF or an active fragment thereof.

13. The method according to claim 1 or 2, wherein the APBF polypeptide is soluble.

14. A pharmaceutical composition comprising a therapeutically effective amount of an isolated APBF polypeptide or a fragment thereof and a pharmaceutically acceptable carrier.

15. A method of therapeutically treating a mammal for a condition associated with undesired cell proliferation, said method comprising administering to said mammal a therapeutically effective amount of a composition comprising an APBF antagonist with a pharmaceutically acceptable recipient.

16. A method of inhibiting non-B-cell growth in a mammal comprising the step of administering a therapeutically effective amount of a composition selected from the group consisting of: (a) An isolated APBF molecule or an active fragment thereof; (b) A recombinant APBF molecule or an active fragment thereof; and (c) an antibody specific for APBF or an active fragment thereof.